

3

Animal Product
Manual

Reference

Bones and Related By-Products

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Introduction

What Is Covered

The *Bones and Related By-Products* section covers the following animal parts and by-products, or cross-references to other categories within the *Reference* section:

- ◆ Antlers
- ◆ Bones
- ◆ Carcass, entire, with skin, hide, or feathers attached
- ◆ Chondroitin sulfate
- ◆ Gelatin
- ◆ Hoofs
- ◆ Horns
- ◆ Items made of bony material
- ◆ Skulls
- ◆ Teeth
- ◆ Tusks

If a commercial importation, then regulate an importation of bones as bone. Also, consider a large quantity of unfinished bones as a commercial importation, and regulate as bones rather than trophies.

What Is Not Covered

Not covered in this section are the following animal products and by-products:


- ◆ Antlers or their products imported for medicinal use such as an aphrodisiac; regulate as Asian medicinal products under **Miscellaneous Products**
- ◆ Bone, hoof, and horn meal; regulate these products as rendered products under **Animal Waste and Related By-Products**
- ◆ Bones consigned to a museum
- ◆ Bones or skulls entering as trophies or souvenirs; regulate these importations under **Trophies**. Trophies and souvenirs would include:
 - ❖ One to two skulls or horns
 - ❖ Skulls or horns that have been lacquered or painted
 - ❖ Clean, dry ruminant skulls free from undried pieces of hide, flesh, and sinew imported for display
- ◆ Bones, horns, or hoofs imported for pet toys; regulate these importations under **Pet Food, and Livestock, Poultry, and Aquaculture Feed**
- ◆ Collagen of bones; regulate these products under **Animal Waste and Related By-Products**
- ◆ Gelatin capsules containing human medication and in final, finished form ready for distribution; such capsules are **unrestricted**
- ◆ Gelatin-containing food products (such as candy, drinks with gelatin, film, gelatin desserts (Royal and Jello), jams, jellies, marshmallows, pudding, and sherbert)

When a VS permit authorizes entry of the bones or related by-product, match the following information on the shipping documents with that on the permit:

- ◆ Current date
- ◆ Description of the material
- ◆ Shipper
- ◆ Consignee
- ◆ Conditions spelled out on the permit

Follow [Table 3-4-1](#) as you match the permit with the shipping documents.






TABLE 3-4-1 Validate Importation Authorized Entry by a VS Permit

If the shipping documents:	And the:	Then:
Match the permit		RELEASE or CONTROL as stated on the permit
Do not match the permit	Permit has expired	<ol style="list-style-type: none"> 1. DO NOT RELEASE the HOLD 2. HAVE the consignee contact VS, TTSPS (see page 2-4-27) 3. SAFEGUARD the importation until you hear from VS, TTSPS
	Discrepancy is other than an expired permit	<ol style="list-style-type: none"> 1. DO NOT RELEASE the HOLD 2. CONTACT PPQ-VRS-AQI or PPQ-VRS-HQ personnel for further action (see Appendix H)

Locator

When a VS permit **does not** authorize entry, use [Table 3-4-2](#) to determine the appropriate regulatory action to take.

TABLE 3-4-2 Where to Find the Regulatory Action on Bones and Related By-Products that Are Not Authorized by a VS Permit

If the bones or related by-products are:	And the importation is entering:	Then:
Bone ash, bone black, or bone char		GO to Table 3-4-3
Bones: horns, hoofs, antlers, skulls, teeth, tusks, dried bones, granulated bones, crushed bones	For manufacturing or as manufactured items such as pistol grips, knife handles, buttons, souvenirs	GO to Table 3-4-6
	Hoofs other than for pet toys	GO to Table 3-4-10
	For purposes other than described in the two cells above	GO to Table 3-4-13
Chondroitin sulfate		GO to Table 3-4-12
Entire carcass with skin, hide, or feathers attached		GO to Table 3-4-13
Gelatin		Go to Table 3-4-4
Gelatin-containing foods		Unrestricted

Bone Ash, Bone Black, or Bone Char

TABLE 3-4-3 Bone Ash, Bone Black, or Bone Char









If the bone char is from:	And the bones originated from a region:	And were processed in:	And the importation:	Then:
Ruminant	Free from BSE	A region affected with BSE	Is accompanied by a VS Permit	RELEASE or CONTROL as stated on the permit
			Lacks a VS Permit	1. DO NOT RELEASE the HOLD 2. ADVISE the importer that the material is being held because the importation requires a VS permit 3. PROVIDE the importer with the appropriate options including apply for a VS permit (see page 2-4-27)
		Their region of origin or another region free from BSE	Is accompanied by the appropriate certification ¹	RELEASE
			Lacks the proper certification ¹	1. DO NOT RELEASE the HOLD 2. PROVIDE the importer with the appropriate options (see page 2-2-11)
Other than ruminant	Affected with BSE			
Other than ruminant				

- 1 A government certificate stating that (a) the product was derived from ruminant bones from a region (**must** state the region) **other than** those considered by the USDA to be affected with BSE, and (b) during processing, there was **no** commingling with any ruminant material from a region considered by the USDA to be affected with BSE.

Gelatin

To determine the regulatory action to take on gelatin, see [Table 3-4-4](#).




TABLE 3-4-4 Gelatin

If the gelatin product was derived from:	And the animal source is:	And the importation is:	Then:
Equine (horse)		Accompanied by veterinary certification ¹	RELEASE
		Lacks the required veterinary certification ¹	1. DO NOT RELEASE the HOLD 2. GIVE the importer the opportunity to obtain certification 3. If unable to obtain certification, then PROVIDE the importer with the appropriate options
Fish		Accompanied by veterinary certification ¹	RELEASE
		Lacks the required veterinary certification ¹	1. DO NOT RELEASE the HOLD 2. GIVE the importer the opportunity to obtain certification 3. If unable to obtain certification, then PROVIDE the importer with the appropriate options
Ruminant	Bovine (cattle, bison, buffalo, yak)		GO to Table 3-4-5
	Camelid (alpacas, camels, or llamas)		RELEASE; unrestricted
	Caprine (goats)		GO to Table 3-4-5
	Cervid (caribou, deer, elk, moose, reindeer)		RELEASE; unrestricted
	Ovine (sheep)		GO to Table 3-4-5
Swine		Accompanied by veterinary certification ¹	RELEASE
		Lacks the required veterinary certification ¹	1. DO NOT RELEASE the HOLD 2. GIVE the importer the opportunity to obtain certification 3. If unable to obtain certification, then PROVIDE the importer with the appropriate options

¹ A veterinary certificate of origin stating the species (or kind) of animal from which the gelatin is derived (i.e., equine (horse), fish, or swine).

Gelatin Derived from Ruminants

TABLE 3-4-5 Gelatin Derived from Ruminants


If the product was derived from:	And the country of origin is known to be:	And is from:	And the importation:	Then:
<ul style="list-style-type: none"> ◆ Bovine (bison, buffalo, cattle, yak) ◆ Caprine (goats) ◆ Ovine (sheep) 	Affected with BSE		Is accompanied by a VS permit	RELEASE
			Lacks a VS permit	<ol style="list-style-type: none"> 1. DO NOT RELEASE the HOLD 2. ADVISE the importer of the HOLD because the importation requires a VS permit authorizing its entry 3. PROVIDE the importer with the appropriate options including applying for a VS permit (see Table 2-2-11 and page 2-4-27)
		Hides	Is accompanied by a VS permit	RELEASE
			Lacks a VS permit	<ol style="list-style-type: none"> 1. DO NOT RELEASE the HOLD 2. ADVISE the importer of the HOLD because the importation requires a VS permit authorizing its entry 3. PROVIDE the importer with the appropriate options including applying for a VS permit (see Table 2-2-11 and page 2-4-27)
Bovine (bison, buffalo, cattle, yak)	Minimal risk for BSE ¹	Bones	Is accompanied by veterinary certification from CFIA ²	RELEASE
			Lacks veterinary certification from CFIA ²	<ol style="list-style-type: none"> 1. DO NOT RELEASE the HOLD 2. GIVE the importer the opportunity to obtain certification 3. If unable to obtain certification, PROVIDE the importer with the appropriate options (see Table 2-2-11)
<ul style="list-style-type: none"> ◆ Bovine (bison, buffalo, cattle, yak) ◆ Caprine (goats) ◆ Ovine (sheep) 	Free from BSE		Is accompanied by veterinary certification ²	RELEASE
			Lacks the required certification ²	<ol style="list-style-type: none"> 1. DO NOT RELEASE the HOLD 2. GIVE the importer the opportunity to obtain certification 3. PROVIDE the importer with the appropriate options including apply for a VS permit (see Table 2-2-11 and page 2-4-27)
<ul style="list-style-type: none"> ◆ Camelid (alpacas, camels) ◆ Cervid (caribou, deer, elk) 				RELEASE; unrestricted

- 1 Currently Canada is the **only** country designated at minimal risk for BSE.
- 2 A government certificate of origin stating that the gelatin is derived from ruminants in regions **other than** those considered by USDA to be affected with BSE.

Bones, Etc. for Manufacturing

Bones (horns, hoofs, antlers, skulls, teeth, tusks, dried bones, granulated bones, crushed bones) imported for manufacturing may still require some drilling, shaping, or grinding. If the bones require further processing, then they **must** be finished at an establishment that is approved to properly dispose of the residue (pieces, chips, or dust).

TABLE 3-4-6 Bones for Manufacturing

If the bones are:	And the bones are from:	Then:
Fully finished, ready to use such as: <ul style="list-style-type: none">◆ Buttons◆ Knife handles◆ Pistol grips◆ Souvenirs		RELEASE
Not fully finished; still requiring some drilling, shaping, sanding, or grinding	Ruminant	GO to Table 3-4-8
	Other than a ruminant	GO to Table 3-4-7

Bones Not Fully Finished, and from Other than Ruminants

TABLE 3-4-7 Bones that Are Not Fully Finished, and Are from Other Than Ruminants

If the importation is:	And is:	Then:
Bones that are not fully finished, and are from other than ruminants	Consigned to an approved establishment	AUTHORIZE shipment under seal with VS 16-78 (see Appendix K to complete form)
	Not consigned to an approved establishment	1. DO NOT RELEASE the HOLD 2. PROVIDE the importer with the appropriate options (see Table 2-2-11)

Ruminant Bones Not Fully Finished







TABLE 3-4-8 Ruminant Bones that Are Not Fully Finished

If the ruminant bones are:	And the bones are:	And from a region known to be:	And the importation is:	Then:
Not fully-finished ruminant bones	Cervid origin, not including antlers	Affected with BSE	→	REFUSE ENTRY
		Minimal risk for BSE ¹	Consigned to an approved establishment ²	AUTHORIZE shipment under seal with VS Form 16-78 (see Appendix K to complete the form)
			Not consigned to an approved establishment ²	1. DO NOT RELEASE the HOLD 2. PROVIDE the importer with the appropriate options (see Table 2-2-11)
		Free from BSE	Consigned to an approved establishment ²	AUTHORIZE shipment under seal with VS Form 16-78 (see Appendix K to complete the form)
			Not consigned to an approved establishment ²	1. DO NOT RELEASE the HOLD 2. PROVIDE the importer with the appropriate options (see Table 2-2-11)
	Cervid origin, antlers only	Affected with BSE	→	REFUSE ENTRY
		Minimal risk for BSE ¹	→	GO to Table 3-4-9
		Free from BSE	→	GO to Table 3-4-9
	Other than cervid origin	Affected with BSE	→	REFUSE ENTRY
		Minimal risk for BSE ¹	→	REFUSE ENTRY
		Free from BSE	Consigned to an approved establishment ²	AUTHORIZE shipment under seal with VS Form 16-78 (see Appendix K to complete the form)
			Not consigned to an approved establishment ²	1. DO NOT RELEASE the HOLD 2. PROVIDE the importer with the appropriate options (see Table 2-2-11)

1 Currently Canada is the **only** country designated at minimal risk for BSE.

2 Since **cervid** commodities from a country at minimal risk for BSE are **not** restricted because of BSE, the approved establishments will treat materials for other diseases.

TABLE 3-4-9 Cervid Antlers from a Region Known to Be Free from BSE or Minimal Risk for BSE

If:	And the country or region of origin is:	And:	And the shipment is:	
Cervid antlers	Free from both BSE and FMD	Is accompanied by the appropriate certification ¹		RELEASE
		Not accompanied by the appropriate certification ¹	Consigned to an approved establishment	AUTHORIZE shipment under seal with VS Form 16-78 (see Appendix K to complete the form)
			Not consigned to an approved establishment	1. DO NOT RELEASE the HOLD 2. PROVIDE the importer with the appropriate options (see Table 2-2-11)
	Free from BSE, but affected with FMD		Consigned to an approved establishment	AUTHORIZE shipment under seal with VS Form 16-78 (see Appendix K to complete the form)
			Not consigned to an approved establishment	1. DO NOT RELEASE the HOLD 2. PROVIDE the importer with the appropriate options (see Table 2-2-11)
	Minimal risk for BSE ² , and free from FMD	Is accompanied by the appropriate certification ¹		RELEASE
		Not accompanied by the appropriate certification ¹	Consigned to an approved establishment	AUTHORIZE shipment under seal with VS Form 16-78 (see Appendix K to complete the form)
			Not consigned to an approved establishment	1. DO NOT RELEASE the HOLD 2. PROVIDE the importer with the appropriate options (see Table 2-2-11)
	Minimal risk for BSE ² , but affected with FMD		Consigned to an approved establishment	AUTHORIZE shipment under seal with VS Form 16-78 (see Appendix K to complete the form)
			Not consigned to an approved establishment	1. DO NOT RELEASE the HOLD 2. PROVIDE the importer with the appropriate options (see Table 2-2-11)

1 An original health certificate endorsed by a full-time salaried veterinarian of the agency responsible for animal health of the country of origin certifying the:



- ◆ Name of the FMD-free country of origin
- ◆ Antlers are clean, dry, and free of soil, clay, sand, tissue, and undried pieces of hide, flesh, sinew, and other related materials

2 Currently Canada is the **only** country designated at minimal risk for BSE.

Hoofs Other than for Pet Toys

To determine the action to take for importations of hoofs that are for other than pet toys, see [Table 3-4-10](#).

TABLE 3-4-10 Hoofs Other Than for Pet Toys

If:	And the hoofs are from:	And from a region known to be:	Then:
Hoofs other than for pet toys	Ruminant	Affected with BSE	1. DO NOT RELEASE the HOLD 2. PROVIDE the importer with the appropriate options (see Table 2-2-11)
		Free from BSE	GO to Table 3-4-11
	Swine		
	Neither ruminant nor swine		RELEASE

Hoofs of Swine or of Ruminant from a Country of Origin Known to Be Free from BSE

TABLE 3-4-11 Hoofs of a Ruminant or Swine from a Country of Origin Known to Be Free from BSE










If:	And the country of origin is known to be:	And:	And:	Then:
<ul style="list-style-type: none"> ◆ Hoofs of ruminant ◆ Hoofs of swine 	Free from BSE	Accompanied by a government of origin certificate stating that the hoofs were processed by an approved method ¹	→	RELEASE
		Lacks the required certification stating an approved method of processing ¹	Consigned to an approved establishment	AUTHORIZE shipment under seal with VS 16-78 (see Appendix K to complete form)
			Not consigned to an approved establishment	1. DO NOT RELEASE the HOLD 2. PROVIDE the importer with the appropriate options (see Table 2-2-11)

1 One of the following approved methods for processing **must** appear on the certificate:

- ◆ Dry heat at 180°F (82.2°C) for 30 minutes
- ◆ Soaking in boiling water for 20 minutes
- ◆ Soaking for 2 hours in a 0.1 percent solution of chlorine bleach
- ◆ Soaking for 2 hours in a 5 percent solution of acetic acid
- ◆ Soaking for 2 hours in a 5 percent solution of hydrogen peroxide

Chondroitin Sulfate and Glucosamine

TABLE 3-4-12 Chondroitin Sulfate and Glucosamine



If from:	And the country of origin is:	And the was processed in:	And the importation:	Then:
Ruminant (bovine, caprine, or ovine)	Affected with BSE			1. REFUSE ENTRY 2. PROVIDE the importer with the appropriate options (see Table 2-2-11)
	Free from BSE	Region affected with BSE	Is accompanied by a VS Permit	RELEASE or CONTROL as stated on the permit
			Lacks a VS Permit ¹	1. DO NOT RELEASE the HOLD 2. PROVIDE the importer with the appropriate options (see Table 2-2-11)
		Region of origin or another region free from BSE	Is accompanied by a VS Permit	RELEASE or CONTROL as stated on the permit
			Lacks a VS Permit ¹	1. DO NOT RELEASE the HOLD 2. PROVIDE the importer with the appropriate options (see Table 2-2-11)
Livestock other than a ruminant (avian or porcine for example)			Lacks a VS Permit ¹	
			Is accompanied by a VS Permit ¹	RELEASE or CONTROL as stated on the permit
Marine species (usually shark)			Is accompanied by the shipper's or producer's declaration ²	RELEASE
			Lacks the appropriate declaration ²	1. DO NOT RELEASE the HOLD 2. CONTACT PPQ-VRS-AQI or PPQ-VRS-HQ personnel for further action (see Appendix H)

- 1 Let the importer know that the material is being held because the importation requires a VS Permit. If asked, let the importer know how to apply for a VS Permit (see [page 2-4-27](#)).
- 2 Original, signed statements on the producer's or shipper's letterhead which affirms in a clear and concise manner the following information:
 - ◆ Identification of the material and species of origin
 - ◆ Written declaration indicating the material **does not** include any equine, ruminant, swine, or avian species or their materials (such as in transport media or stabilizers)

Bones and Related By-Products Not Specifically Mentioned Elsewhere

Use [Table 3-4-13](#) when the importation is bones (horns, hoofs, antlers, skulls, teeth, tusks, dried bones, granulated bones, crushed bones) or entire carcasses with skin, hide, or feathers attached that are being imported for purposes **other than** what is covered in this section.

TABLE 3-4-13 Bones and Related By-Products Not Specifically Mentioned Elsewhere

If the bones and related by-products not specifically mentioned elsewhere are from:	And are from a region known to be:	And the importation is:	Then:
Ruminant	Affected with BSE		REFUSE ENTRY
	Free from BSE	Consigned to an approved establishment ¹	AUTHORIZE shipment under seal with VS 16-78 (see Appendix K to complete form)
		Not consigned to an approved establishment	1. DO NOT RELEASE the HOLD 2. PROVIDE the importer with the appropriate options (see Table 2-2-11)
Other than ruminant		Consigned to an approved establishment ¹	AUTHORIZE shipment under seal with VS 16-78 (see Appendix K to complete form)
		Not consigned to an approved establishment	1. DO NOT RELEASE the HOLD 2. PROVIDE the importer with the appropriate options (see Table 2-2-11)

¹ The approved establishments will treat materials for other diseases, including anthrax.